

UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION

NEODRON LTD.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD. and  
SAMSUNG ELECTRONICS AMERICA, INC.,

Defendants.

Case No. 6:19-cv-00323

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT AGAINST SAMSUNG  
ELECTRONICS CO. LTD. AND SAMSUNG ELECTRONICS AMERICA, INC.**

This is an action for patent infringement arising under the Patent Laws of the United States of America, 35 U.S.C. § 1 *et seq.*, in which Plaintiff Neodron Ltd. (“Plaintiff” or “Neodron”) makes the following allegations against Defendants Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, “Defendants”):

**INTRODUCTION**

1. This complaint arises from Defendants’ unlawful infringement of the following United States patents owned by Neodron, each of which generally relate to touchscreen technology: United States Patent Nos. 8,432,173 (“173 Patent”); 8,791,910 (“910 Patent”); 9,024,790 (“790 Patent”); and 9,372,580 (“580 Patent”) (collectively, the “Asserted Patents”).

2. Touchscreen technology plays a ubiquitous and important role in countless electronic devices today. Beyond just providing greater usability to smartphones, tablets and notebooks, touchscreens now fill our lives in public and private spaces, from our homes and cars to the restaurants and stores we visit.

3. But just a few decades ago, touchscreen technology could only be found in science fiction books and film. Although the underlying science behind touch technology can be traced back to the 1940s, working touchscreens were not conceived and feasible until the mid-1960s, when the first finger-driven touchscreen was invented by E.A. Johnson in 1965 at the Royal Radar Establishment in Malvern, United Kingdom. Since then, it took several generations and major technological advancements for touchscreens to achieve the level of complexity—and convenience—we see and enjoy today.

4. Built on the fundamental breakthrough that our hands and fingers can form changes in the capacitance of electrodes and electrode-connections when they are in close proximity to them, touch technology has developed rapidly over the years. Along the way, engineers have worked tirelessly to try to overcome the limitations and roadblocks touch technology presents. From conceiving various ways to detect (and correctly ignore) unintentional touches, to minimizing signal “noise,” to reducing the latency and power consumption that comes with any complex, multi-part electrical process, there have been many advances to various aspects of the technology—each building a little on a related advancement before it—to get us to the highly advanced state we enjoy today.

5. These advancements range from fundamental ones, which make basic touch technology work, to optional improvements, which typically represent one technological option that improves aspects of the user experience and functionality of a touchscreen. This infringement action is about the latter: several patented improvements—which took years of research and millions of dollars in U.S. investments to develop, and which are infringed by Defendants’ accused products.

## **PARTIES**

6. Plaintiff Neodron, Ltd. is an Irish company, having its principal place of business at Unit 4-5, Burton Hall Road, Sandyford, Dublin 18, D18a094. Neodron is the sole owner by assignment of all right, title, and interest in each Asserted Patent.

7. On information and belief, Defendant Samsung Electronics Co., Ltd. is a corporation organized under the laws of South Korea, with its principal place of business at 129 Samsung-Ro, Maetan-3dong, Yeongtong-gu, Suwon, 443-742, South Korea.

8. On information and belief, Defendant Samsung Electronics America, Inc., a wholly owned subsidiary of Samsung Electronics Co., Ltd., is a corporation organized under the laws of the State of New York, with its principal place of business at 85 Challenger Rd., Ridgefield Park, New Jersey 07660.

#### **JURISDICTION AND VENUE**

9. This action arises under the patent laws of the United States, Title 35 of the United States Code. This Court has original subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

10. This Court has personal jurisdiction over Defendants in this action because Defendants have committed acts within this District giving rise to this action, and have established minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Defendants, directly and through subsidiaries or intermediaries, have committed and continue to commit acts of infringement in this District by, among other things, importing, offering to sell, and selling products that infringe the asserted patents.

11. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b). Defendants are registered to do business in Texas, and upon information and belief, Defendants have

transacted business in this District and have committed acts of direct and indirect infringement in this District by, among other things, making, using, offering to sell, selling, and importing products that infringe the asserted patents. Defendants have regular and established places of businesses in this District, including at 12100 Samsung Boulevard, Austin, Texas 78754; 7300 Ranch Road 2222, Austin, Texas 78730; and 1700 Scenic Loop, Round Rock, Texas 78681.<sup>1</sup>

**COUNT I**

**INFRINGEMENT OF U.S. PATENT NO. 8,432,173**

12. Neodron realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

13. Neodron owns by assignment all rights, title, and interest in U.S. Patent No. 8,432,173, entitled “Capacitive Position Sensor.” The ’173 Patent was duly and legally issued by the United States Patent and Trademark Office on April 30, 2013. A true and correct copy of the ’173 Patent is attached as Exhibit 1.

14. On information and belief, Defendants make, use, offer for sale, sell, and/or import certain products (“Accused Products”), such as the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–19 of the ’173 Patent.

15. Defendants also knowingly and intentionally induce infringement of at least claims 1 and 3–9 of the ’173 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of

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<sup>1</sup> See, e.g., <https://www.samsung.com/semiconductor/insights/news-events/austin-texas-named-new-home-for-samsung-electronics/>; <https://www.statesman.com/news/20181115/samsung-says-it-will-invest-291-million-in-austin-operations>; <https://www.service-center-locator.com/samsung/texas/samsung-austin-texas.htm>.

this Complaint, and also through the filing and service of a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, Defendants have had knowledge of the '173 Patent and the infringing nature of the Accused Products. Despite this knowledge of the '173 Patent, Defendants continue to actively encourage and instruct their customers and end users (for example, through user manuals and online instruction materials on their website) to use the Accused Products in ways that directly infringe the '173 Patent. Defendants do so knowing and intending that their customers and end users will commit these infringing acts. Defendants also continue to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '173 Patent, thereby specifically intending for and inducing their customers to infringe the '173 Patent through the customers' normal and customary use of the Accused Products.

16. The Accused Products satisfy all claim limitations of at least claims 1–19 of the '173 Patent. Claim charts comparing independent claims 1, 10 and 19 of the '173 Patent to representative Accused Products, the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, are attached as Exhibits 2–4.

17. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendants have injured Neodron and are liable for infringement of the '173 Patent pursuant to 35 U.S.C. § 271.

18. As a result of Defendants' infringement of the '173 Patent, Neodron is entitled to monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court.

19. Defendants' infringing activities have injured and will continue to injure Neodron,

unless and until this Court enters an injunction prohibiting further infringement of the '173 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

**COUNT II**

**INFRINGEMENT OF U.S. PATENT NO. 8,791,910**

20. Neodron realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

21. Neodron owns by assignment all rights, title, and interest in U.S. Patent No. 8,791,910 (the "'910 Patent"), entitled "Capacitive Keyboard With Position-Dependent Reduced Keying Ambiguity." The '910 Patent was duly and legally issued by the United States Patent and Trademark Office on July 29, 2014. A true and correct copy of the '910 Patent is attached as Exhibit 5.

22. On information and belief, Defendants make, use, offer for sale, sell, and/or import certain products ("Accused Products"), such as the Samsung Galaxy S9+ and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–37 of the '910 Patent.

23. Defendants also knowingly and intentionally induce infringement of at least claims 1–12 of the '910 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, Defendants have had knowledge of the '910 Patent and the infringing nature of the

Accused Products. Despite this knowledge of the '910 Patent, Defendants continue to actively encourage and instruct their customers and end users (for example, through user manuals and online instruction materials on their website) to use the Accused Products in ways that directly infringe the '910 Patent. Defendants do so knowing and intending that their customers and end users will commit these infringing acts. Defendants also continue to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the '910 Patent, thereby specifically intending for and inducing their customers to infringe the '910 Patent through the customers' normal and customary use of the Accused Products.

24. The Accused Products satisfy all claim limitations of at least claims 1–37 of the '910 Patent. Claim charts comparing independent claims 1, 13, and 25 of the '910 Patent to representative Accused Products, the Samsung Galaxy S9+ and Samsung Notebook 9 Pro 15, are attached as Exhibits 6–7.

25. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendants have injured Neodron and are liable for infringement of the '910 Patent pursuant to 35 U.S.C. § 271.

26. As a result of Defendants' infringement of the '910 Patent, Neodron is entitled to monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court.

27. Defendants' infringing activities have injured and will continue to injure Neodron, unless and until this Court enters an injunction prohibiting further infringement of the '910 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

**COUNT III**

**INFRINGEMENT OF U.S. PATENT NO. 9,024,790**

28. Neodron realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

29. Neodron owns by assignment all rights, title, and interest in U.S. Patent No. 9,024,790 (the “’790 Patent”), entitled “Capacitive Keyboard With Non-Locking Reduced Keying Ambiguity.” The ’790 Patent was duly and legally issued by the United States Patent and Trademark Office on May 5, 2015. A true and correct copy of the ’790 Patent is attached as Exhibit 8.

30. On information and belief, Defendants make, use, offer for sale, sell, and/or import certain products (“Accused Products”), such as the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1, 4–8, 10–14, and 16–24 of the ’790 Patent.

31. Defendants also knowingly and intentionally induce infringement of at least claims 7, 8, 10–12, and 22–24 of the ’790 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, Defendants have had knowledge of the ’790 Patent and the infringing nature of the Accused Products. Despite this knowledge of the ’790 Patent, Defendants continue to actively encourage and instruct their customers and end users (for example, through user manuals and online instruction materials on their website) to use the Accused Products in ways that directly infringe the ’790 Patent. Defendants do so knowing and intending that their customers and end users will commit these infringing acts. Defendants also continue to make, use, offer for

sale, sell, and/or import the Accused Products, despite their knowledge of the '790 Patent, thereby specifically intending for and inducing their customers to infringe the '790 Patent through the customers' normal and customary use of the Accused Products.

32. The Accused Products satisfy all claim limitations of at least claims 1, 4–8, 10–14, and 16–24 of the '790 Patent. Claim charts comparing independent claims 1, 7, and 13 of the '790 Patent to representative Accused Products, the Samsung Galaxy S9+, Samsung Galaxy Tab S4 10.5, and Samsung Notebook 9 Pro 15, are attached as Exhibits 9–11.

33. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendants have injured Neodron and are liable for infringement of the '790 Patent pursuant to 35 U.S.C. § 271.

34. As a result of Defendants' infringement of the '790 Patent, Neodron is entitled to monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court.

35. Defendants' infringing activities have injured and will continue to injure Neodron, unless and until this Court enters an injunction prohibiting further infringement of the '790 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

#### **COUNT IV**

##### **INFRINGEMENT OF U.S. PATENT NO. 9,372,580**

36. Neodron realleges and incorporates by reference the foregoing paragraphs as if fully set forth herein.

37. Neodron owns by assignment all rights, title, and interest in U.S. Patent No.

9,372,580 (the “’580 Patent”), entitled “Enhanced Touch Detection Methods.” The ’580 Patent was duly and legally issued by the United States Patent and Trademark Office on June 21, 2016. A true and correct copy of the ’580 Patent is attached as Exhibit 12.

38. On information and belief, Defendants make, use, offer for sale, sell, and/or import certain products (“Accused Products”), such as the Samsung Galaxy S9+ and Samsung Galaxy Tab S4 10.5, that directly infringe, literally and/or under the doctrine of equivalents, at least claims 1–12 of the ’580 Patent.

39. Defendants also knowingly and intentionally induce infringement of at least claims 1–4 of the ’580 Patent in violation of 35 U.S.C. § 271(b). Through the filing and service of this Complaint, and also through the filing and service of a complaint with the United States International Trade Commission (ITC) pursuant to Section 337 of the Tariff Act of 1930, 19 U.S.C. § 1337, Defendants have had knowledge of the ’580 Patent and the infringing nature of the Accused Products. Despite this knowledge of the ’580 Patent, Defendants continue to actively encourage and instruct their customers and end users (for example, through user manuals and online instruction materials on their website) to use the Accused Products in ways that directly infringe the ’580 Patent. Defendants do so knowing and intending that their customers and end users will commit these infringing acts. Defendants also continue to make, use, offer for sale, sell, and/or import the Accused Products, despite their knowledge of the ’580 Patent, thereby specifically intending for and inducing their customers to infringe the ’580 Patent through the customers’ normal and customary use of the Accused Products.

40. The Accused Products satisfy all claim limitations of at least claims 1–12 of the ’580 Patent. Claim charts comparing independent claims 1, 5, and 9 of the ’580 Patent to representative Accused Products, the Samsung Galaxy S9+ and Samsung Galaxy Tab S4 10.5, are

attached as Exhibits 13–14.

41. By making, using, offering for sale, selling and/or importing into the United States the Accused Products, Defendants have injured Neodron and are liable for infringement of the '580 Patent pursuant to 35 U.S.C. § 271.

42. As a result of Defendants' infringement of the '580 Patent, Neodron is entitled to monetary damages in an amount adequate to compensate for Defendants' infringement, but in no event less than a reasonable royalty for the use made of the invention by Defendants, together with interest and costs as fixed by the Court.

43. Defendants' infringing activities have injured and will continue to injure Neodron, unless and until this Court enters an injunction prohibiting further infringement of the '580 Patent, and, specifically, enjoining further manufacture, use, sale, importation, and/or offers for sale that come within the scope of the patent claims.

#### **PRAYER FOR RELIEF**

WHEREFORE, Neodron respectfully requests that this Court enter:

a. A judgment in favor of Neodron that Defendants have infringed, either literally and/or under the doctrine of equivalents, the '173 Patent, the '910 Patent, the '790 Patent, and the '580 Patent;

b. A permanent injunction prohibiting Defendants from further acts of infringement of the '173 Patent, the '910 Patent, the '790 Patent, and the '580 Patent;

c. A judgment and order requiring Defendants to pay Neodron its damages, costs, expenses, and pre-judgment and post-judgment interest for Defendants' infringement of the '173 Patent, the '910 Patent, the '790 Patent, and the '580 Patent; and

d. A judgment and order requiring Defendants to provide an accounting and to pay

supplemental damages to Neodron, including without limitation, pre-judgment and post-judgment interest;

e. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Neodron its reasonable attorneys' fees against Defendants; and

f. Any and all other relief as the Court may deem appropriate and just under the circumstances.

**DEMAND FOR JURY TRIAL**

Neodron, under Rule 38 of the Federal Rules of Civil Procedure, requests a trial by jury of any issues so triable by right.

Dated: May 21, 2019

Respectfully submitted,

*/s/ Paul A. Kroeger*

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